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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,433	04/19/2001	Daniel Gelbart	200	8910

7590                    08/01/2002

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[REDACTED]  
EXAMINER

HASAN, MOHAMMED A

[REDACTED]  
ART UNIT                  PAPER NUMBER

2873

DATE MAILED: 08/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/837,433

Applicant(s)

GELBART, DANIEL

Examiner

Mohammed Hasan

Art Unit

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM

THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed

- after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1 - 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 22- 26 is/are allowed.
- 6) Claim(s) 1- 21,27 - 31 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 April 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                              | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                     | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____                                    |

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**DETAILED ACTION**

***Information Disclosure Statement***

1. The prior art documents submitted by applicant in the information Disclosure Statement filed on April 19, 2001 have all been considered and made of record ( note the attached copy of form PTO – 1449).

***Oath/Declaration***

2. The declaration filed on 4/19/01 is accepted.

***Claim Objections***

3. Claims 10 - 13 , 21, 28 – 31 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only, and / or, cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 10 -13, 21, 28 - 31 not been further treated on the merits.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 14 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particular point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1 is rendered indefinite by the use of term "deforming membrane in concave fashion". "deforming membrane" deforming process did not mention in the claim . The aforenoted phrase is meaning less and the aforesaid claim is rendered indefinite.

Regarding claim 14 is rendered indefinite by the use of term " transparent membrane being deformable to vary by deformation the extent of refraction". "transparent membrane being deformable" and " deformation the extent of refraction" deformation process did not mention in the claim . The aforenoted phrase is meaning less and the aforesaid claim is rendered indefinite.

Claims 2- 13, and 15 – 21 are rendered indefinite, because depends on claims 1 and 14.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1, 2, 14, and 15 are rejected under 35 U.S.C 102 (b) as being anticipated by Goossen (5,825,528).

Regarding claim 1, Goossen discloses (referring figures 1 and 2) a method for varying the direction of a light beam passing through a micro machine device (1) having directing light beam through a transparent membrane (15) separating two refractive regions of differing refractive index , membrane being attached at its perimeter (25) (e.g., support arm) to a fixed member (column 3, lines 30 – 42).

Regarding claim 2, Goossen discloses where deformation is induced by electrostatic force (column 3, line 42).

Regarding claim 14, Goossen discloses (refer to figure 1 and 2) an adaptive lens for refractive a light beam transiting through a micro-machined device (1), adaptive lens comprising a transparent membrane (15) separating two refractive regions of differing refractive index.

Regarding claim 15, Goossen discloses where deformation is induced by electrostatic force (column 3, line 42).

***Allowable Subject Matter***

6. Claims 22 – 26 are allowed.
7. The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in a combination fails to anticipate or fairly suggest the

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limitations of the independent claim, in such a manner that a rejection under 35 U.S.C 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claim 22, which include an adaptive lens within a micro-machine device, adaptive lens having a transparent membrane attached at its perimeter to a fixed member, and a membrane being capable of changing its curvature in response to an electrical control signal, and the degree of refraction of adaptive lens being controlled by curvature.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The closest reference Goossen (5,710,656) and Arney et al (5,636,052).

Goossen (5,710,656) discloses a method and apparatus for a micro - mechanical modulator.

Arney et al (5,636,052) discloses a direct – view display comprising an array of micro - mechanical modulator.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (703) 306-0089. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (703) 308-4883. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 308-7724  
for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the receptionist whose telephone number is (703) 308-  
0956.

MH  
July 29, 2002



Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800